

IR-1785 (2-2174)

POWER ASSEMBLY WITH
INTEGRATED CURRENT SENSING

ABSTRACT OF THE DISCLOSURE

A semiconductor module has a conductive heat sink base which receives a power semiconductor and a printed circuit board mounted above the heat sink and carrying control circuits for the power semiconductor. A rigid L-shaped terminal connected to one electrode of the power semiconductor is mounted on the base and extends upward and adjacent an edge of the printed circuit board. A Hall sensor is mounted on the printed circuit board and is disposed in and intercepts the magnetic field produced by current in the terminal. Magnetic bodies are mounted on opposite sides of the Hall element to concentrate the magnetic field through the Hall sensor.